

**Better solutions.  
Fewer disasters.  
Safer world.**



# Francisco Morazán

**Honduras National Disaster Preparedness Baseline Assessment  
Department Profile**

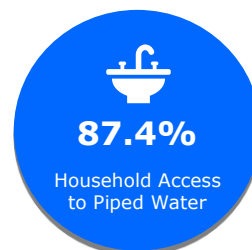
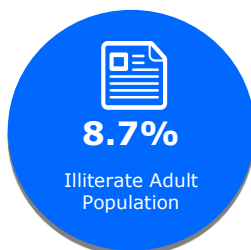


## Department: Francisco Morazán

Department Capital: Tegucigalpa

Area: 8,619 km<sup>2</sup>

Francisco Morazán is located in central Honduras. The department capital of Tegucigalpa is also the national capital and home to the central government. Tegucigalpa is Honduras' largest and most populous city as well as the nation's political and administrative center.



Municipality	Population
Alubarén	5,576
Cedros	26,003
Curarén	20,924
Distrito Central	1,225,043
El Porvenir	23,655
Guaimaca	29,923
La Venta	6,421
Lepaterique	21,767
Maraita	6,927
Marale	9,199
Ojojona	11,017
Orica	14,604
Reitoca	10,761
Sabanagrande	21,781
San Antonio de Oriente	15,598
San Buenaventura	3,029
San Ignacio	9,119
San Juan de Flores	16,857
Santa Ana	16,889
Santa Lucía	14,065
Talanga	36,733
Tatumbula	8,018
Valle de Angeles	18,476
Vallecillo	8,542



**Multi-Hazard Risk Rank: Low (11 of 18)**

**Lack of Resilience Rank: Very Low (17 of 18)**

### RVA Component Scores

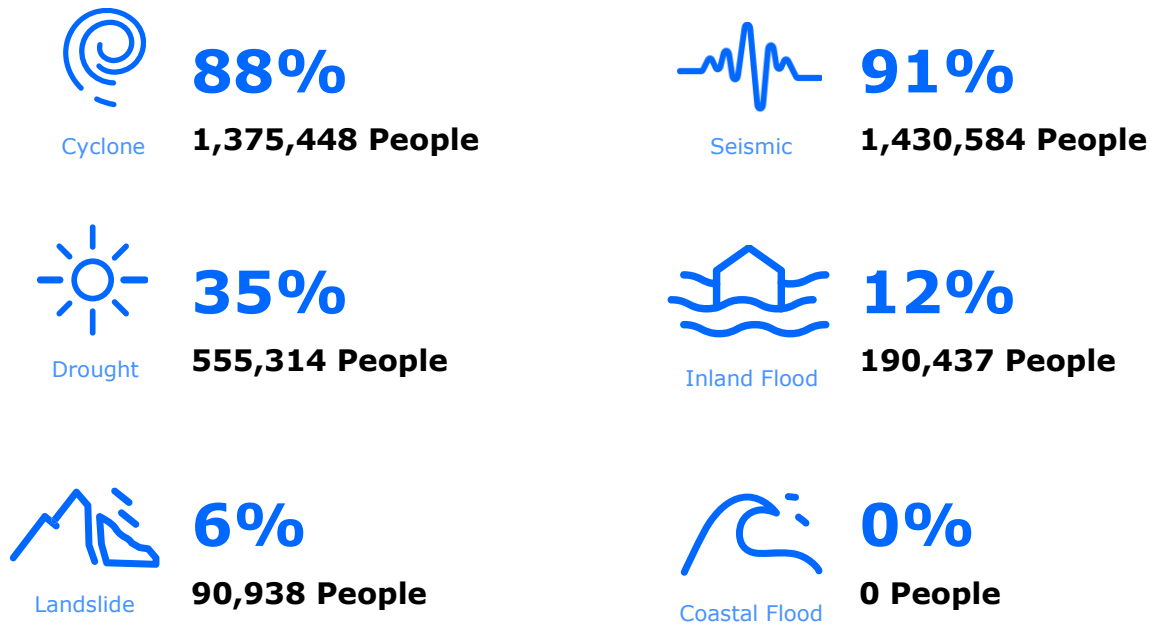
Table 1. Department scores and ranks (compared across departments) for each index.

Multi-Hazard Risk		Lack of Resilience		Multi-Hazard Exposure		Vulnerability		Coping Capacity	
Low		Very Low		Very High		Very Low		Very High	
Score	Rank (of 18)	Score	Rank (of 18)	Score	Rank (of 18)	Score	Rank (of 18)	Score	Rank (of 18)
0.458	11	0.314	17	0.747	2	0.298	16	0.670	3

## Multi-Hazard Exposure (MHE)

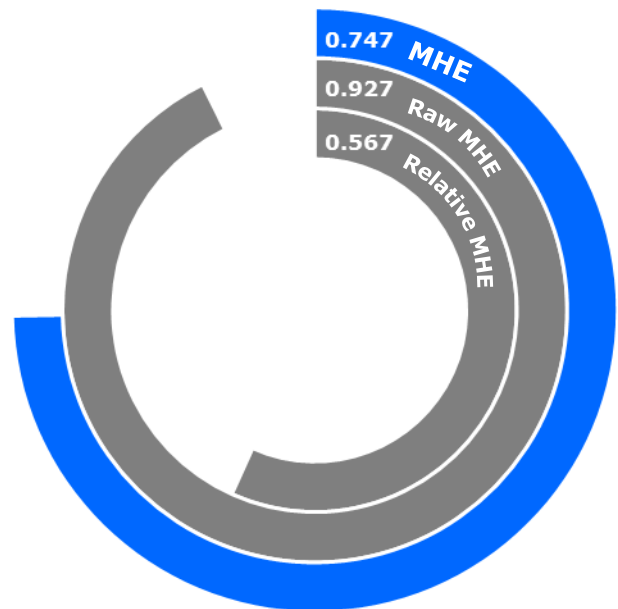
**Multi-Hazard Exposure<sup>1</sup> Rank: 2 of 18 Departments (Score: 0.747)**

Table 2. Estimated ambient population<sup>2</sup> exposed to each hazard (2014).



### Case Study: Tegucigalpa CODEM

The Tegucigalpa CODEM maintains an emergency communications center staffed 24/7, has a designated Emergency Operations Center, and stores relief supplies on site. The CODEM supports 160 local emergency-management committees or CODELs, which are comprised of 11 volunteers who are trained to respond during emergencies. The CODELs are provided with basic tools and uniforms and participate in training at COPECO. Tegucigalpa also maintains the Sistema de Información Municipal sobre Riesgos y Estudios Territoriales (SIMRET), an information system being designed to serve as a central repository for risk-management information among numerous agencies within Tegucigalpa.



<sup>1</sup> Multi-Hazard Exposure: Average exposure of the population to hazards.

<sup>2</sup> Ambient Population: 24-hour average estimate of the population in each department. Ambient population typically differs from census population.

## Vulnerability (V)

**Vulnerability<sup>3</sup> Rank: 16 of 18 Departments (Score: 0.298)**. Despite having very low vulnerability overall, Francisco Morazán ranks 4<sup>th</sup> in Environmental Stress. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Vulnerability score.

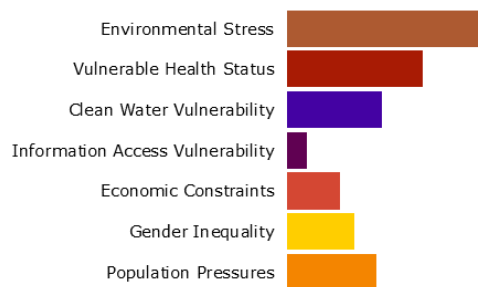


Table 3. Component scores for each vulnerability subcomponent

	<b>Environmental Stress</b>	<b>30.8%</b> Forest Loss Due to Pine Beetle Plague	<b>30.2%</b> Water Shortage Area					
	<b>Vulnerable Health Status</b>	<b>16.1</b> Infant Mortality Rate	<b>206.9</b> Maternal Mortality Ratio	<b>77.1</b> Life Expectancy (years)	<b>1.5%</b> Acute Malnutrition Rate	<b>2.4%</b> Population Disabled	<b>0.590</b> Communicable Disease Sub-Index <sup>4</sup>	<b>0.491</b> Non-Communicable Disease Sub-Index <sup>4</sup>
	<b>Clean Water Vulnerability</b>	<b>87.4%</b> Households Access to Piped Water	<b>74.6%</b> Households Connected to Sewer or Septic System					
	<b>Information Access Vulnerability</b>	<b>8.7%</b> Adult Illiteracy	<b>7.9</b> Average Years of Schooling	<b>95.9%</b> Enrollment in Basic Education	<b>82.4%</b> Households without Internet	<b>16.8%</b> Households without TV	<b>25.8%</b> Households without Radio	
	<b>Economic Constraints</b>	<b>0.57</b> Economic Dependency Ratio	<b>47.0%</b> Population in Poverty	<b>0.26</b> GINI Coefficient				
	<b>Gender Inequality</b>	<b>0.61</b> Ratio of Female to Male Land Ownership Rate	<b>1.00</b> Ratio of Female to Male Home Ownership Rate	<b>0.48</b> Ratio of Female to Male Economic Activity	<b>1.05</b> Ratio of Female to Male Secondary Enrollment			
	<b>Population Pressures</b>	<b>2.3%</b> Average Annual Population Change	<b>3.2%</b> Average Annual Urban Population Change					

<sup>3</sup> **Vulnerability:** The socioeconomic conditions that are associated with the susceptibility to disruptions in a country's normal functions.

<sup>4</sup> **Sub-indices:** A combination of scaled indicators to represent a vulnerability theme (e.g. Communicable Disease). Values range from 0 (low) to 1 (high).

## Coping Capacity (CC)

**Coping Capacity<sup>5</sup> Rank: 3 of 18 Departments (Score: 0.670)**

Francisco Morazán exhibits weaker Coping Capacity in the areas of Environmental Capacity and Transportation Infrastructure. The bar chart on the right indicates the socioeconomic themes contributing to the department's overall Coping Capacity score.

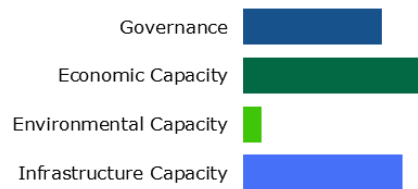









Table 4. Component scores for each coping capacity subcomponent

	<b>Governance</b>	<b>65.5</b> Homicides per 100k Persons	<b>373.4</b> Sexual Violence and Assault per 100k Persons	<b>38.5%</b> Households with Public Garbage Collection	<b>67.1%</b> Voter Participation (2013 Election)	
	<b>Economic Capacity</b>	<b>39.7%</b> Economic Activity Rate	<b>96.8%</b> Employment Rate	<b>35.8%</b> Population in Highest Wealth Quintile		
	<b>Environmental Capacity</b>	<b>6.8%</b> Natural Protected Area				
	<b>Infrastructure Capacity</b>					
	<b>Health Care Capacity</b>	<b>13.0</b> Hospital Beds per 10,000 Persons	<b>6.2</b> Physicians per 10,000 Persons	<b>15.0</b> Nurses per 10,000 Persons	<b>33.1 km</b> Average Distance to Nearest Hospital	<b>85.2%</b> Children Completed Immunization Schedule
	<b>Communications Capacity</b>	<b>40.6%</b> Households with Access to Fixed Phone Line	<b>74.5%</b> Households with Access to Mobile Phone			
	<b>Transportation Capacity</b>	<b>38.2 km</b> Average Distance to nearest Port or Airport	<b>18.2 km</b> Total Length of Road per km <sup>2</sup> (area)			

<sup>5</sup> Coping Capacity: The systems, means, and abilities of a country to absorb and respond to events that could potentially disrupt normal function.

## Lack of Resilience (LR)

**Lack of Resilience<sup>6</sup> Rank: 17 of 18 Departments (Score: 0.314)**

Francisco Morazán’s Lack of Resilience score and ranking are due to very low Vulnerability combined with very high Coping Capacity scores.

Table 5. The three thematic areas with the weakest relative scores.



**Environmental Stress**



**Transportation Infrastructure**



**Environmental Capacity**

## Multi-Hazard Risk (MHR)

**Multi-Hazard Risk<sup>7</sup> Rank: 11 of 18 Departments (Score: 0.458)**

Though Francisco Morazán exhibits a very high Multi-Hazard Exposure score, it is combined with very low Vulnerability and very high Coping Capacity scores, equating to low relative risk overall.

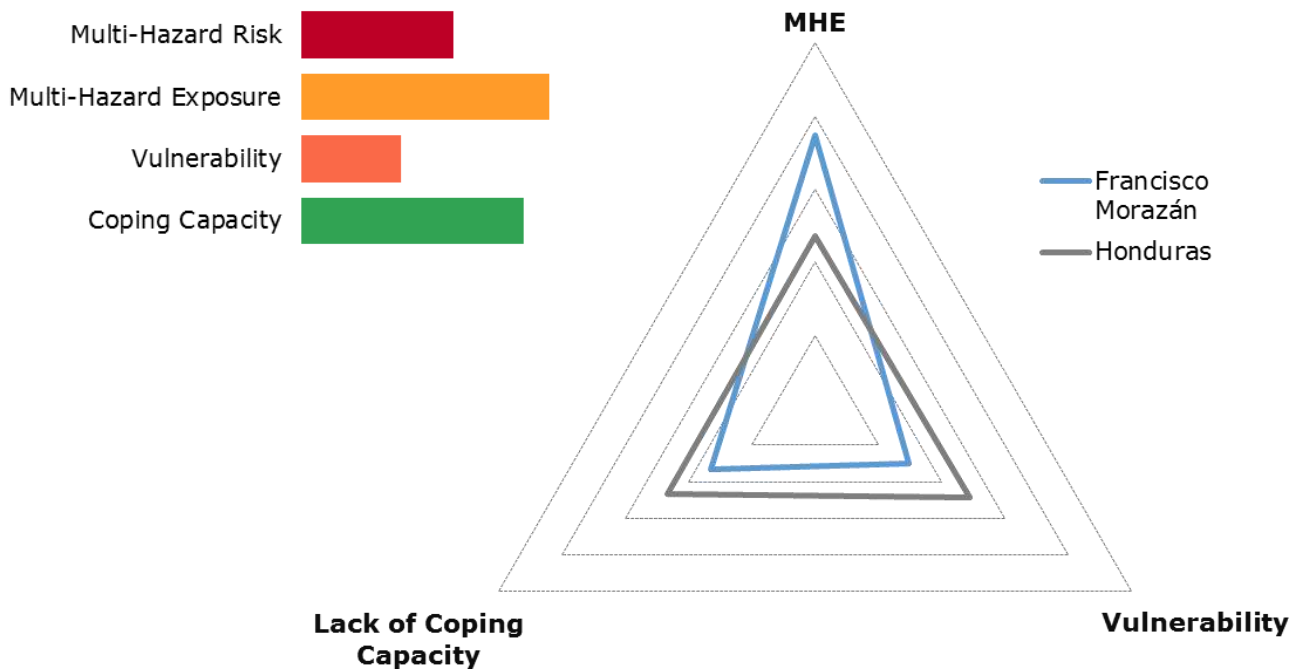


Figure 52. Department multi-hazard risk component scores compared to overall average country scores.

<sup>6</sup> **Lack of Resilience:** The susceptibility to impact from the short-term inability to absorb, respond to, and recover from disruptions to a country’s normal function. This index provides a hazard-independent look at current socio-economic conditions.

<sup>7</sup> **Multi-Hazard Risk:** The likelihood of losses or disruptions to a country’s normal function due to interaction between multi-hazard exposure, socioeconomic vulnerability, and coping capacity.

## Successes



### Lowest gender inequality

Ranked 18 of 18 departments, low gender inequality indicates that vulnerable populations are more likely to have their needs met under 'normal' conditions and may be less susceptible during times of disaster.



### Low economic constraints

Ranked 16 of 18 departments, low economic constraints indicate that Francisco Morazán may be able to invest in additional mitigation and preparedness measures at the local and community level.



### High overall infrastructure capacity

Ranked 2 of 18 departments, well-developed infrastructure – communication, health care, transportation - facilitates the exchange of information and physical distribution of goods and services to the population.

## Recommendations

01

### Institutionalize multi-hazard planning and education

Multi-Hazard Risk in Francisco Morazán is driven primarily by exposure. Develop a departmental multi-hazard mitigation plan to acknowledge exposure to multiple hazards. Engage the public in this process to promote an understanding of multi-hazard risk.

02

### Increase environmental programs

Invest in programs to provide protection for the environment, including protected lands and reforestation projects, to increase the ability of the environment to recover after a disaster.

03

### Invest in infrastructure

Invest in Transportation and Communication Infrastructures to increase coping capacity and resiliency within the department.



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NDPBA Honduras Report  
1305 N. Holocono Street, Suite 2  
Kihei, Hawaii, 96753  
Phone: (808) 891-0525 | Fax: (808) 891-0526  
[ndpba@pdc.org](mailto:ndpba@pdc.org) | [www.pdc.org](http://www.pdc.org)

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